

HEATLOCK® THE STRAIGHT

YOUR GLOBAL HOT-RUNNER SOLUTION



A2-07 Single Cavity EN

www.heatlock.com

HEATLOCK®

**HOT
RUNNER
PERFECTION
MADE
BY
SWEDEN**

**The Allrounder A2 Single Cavity nozzle,
mega performance!**



Our passion is hot runner solutions and we pride ourselves on simplicity whilst maintaining maximum performance, achieving modular perfection.

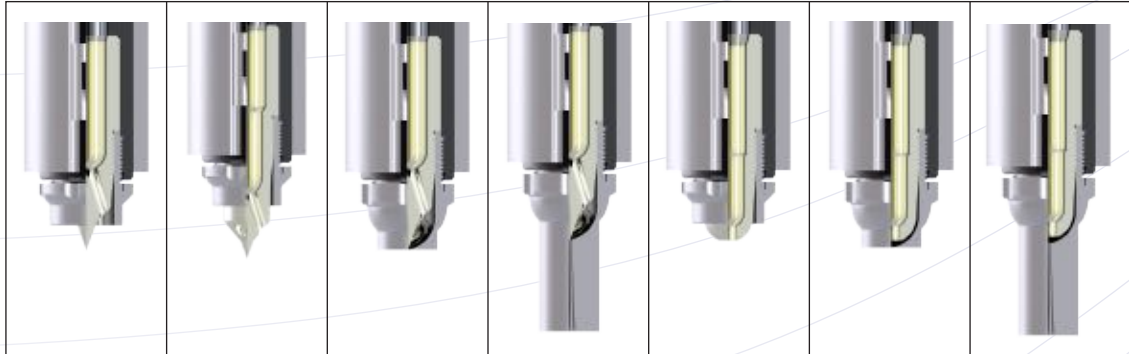
In this development are we pleased to offer a single cavity nozzle designed for longevity and high performance. Suitable for all kinds of resins, commodity or engineering, filled or un-filled. You simply choose the model for your resin, our total modularity makes it possible.

For this all-round single cavity nozzle series have we together with our heater supplier developed the heater to suit the design and application. Regardless of melt temperature of mould temperature do we have an excellent temperature profile, so good we simply call the heater series THE STRAIGHT!
Of course with our signum, easy to service and maintain



→ A2-07 SC Nozzle Selection Guide

(mm)



Type	NOS	NOX	NPS	NPX/NSX	POS	PPS	PPX/PSX
Φ Feed	7	7	7	7	7	7	7
Φ Gate	0.8-3	0.8-3	0.8-3	0.8-3	0.8-3	0.8-3	0.8-3

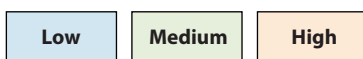
Max. Recommended shot weight

	NOS	NOX	NPS	NPX/NSX	POS	PPS	PPX/PSX
Low	400	400	400	400	600	600	600
Medium	260	260	260	260	310	310	310
High	50	50	50	50	60	60	60

Suitability

PP	***	***	***	***	***	***	***
PS/PE	***	***	***	***	***	***	***
ABS/SAN	***	***	***	***	***	***	***
POM	***	***	***	***	***	***	***
LCP	*	*	*	*	*	*	*
PBT	*	*	*	*	*	*	*
PET	*	*	*	*	*	*	*
PA6/PA66	***	***	***	***	***	***	***
PC	***	***	***	***	***	***	***
PMMA	***	***	***	***	***	***	***
PPO	*	*	*	*	*	*	*
PES/PEK	*	*	*	*	*	*	*
PPS/PEI	*	*	*	*	*	*	*

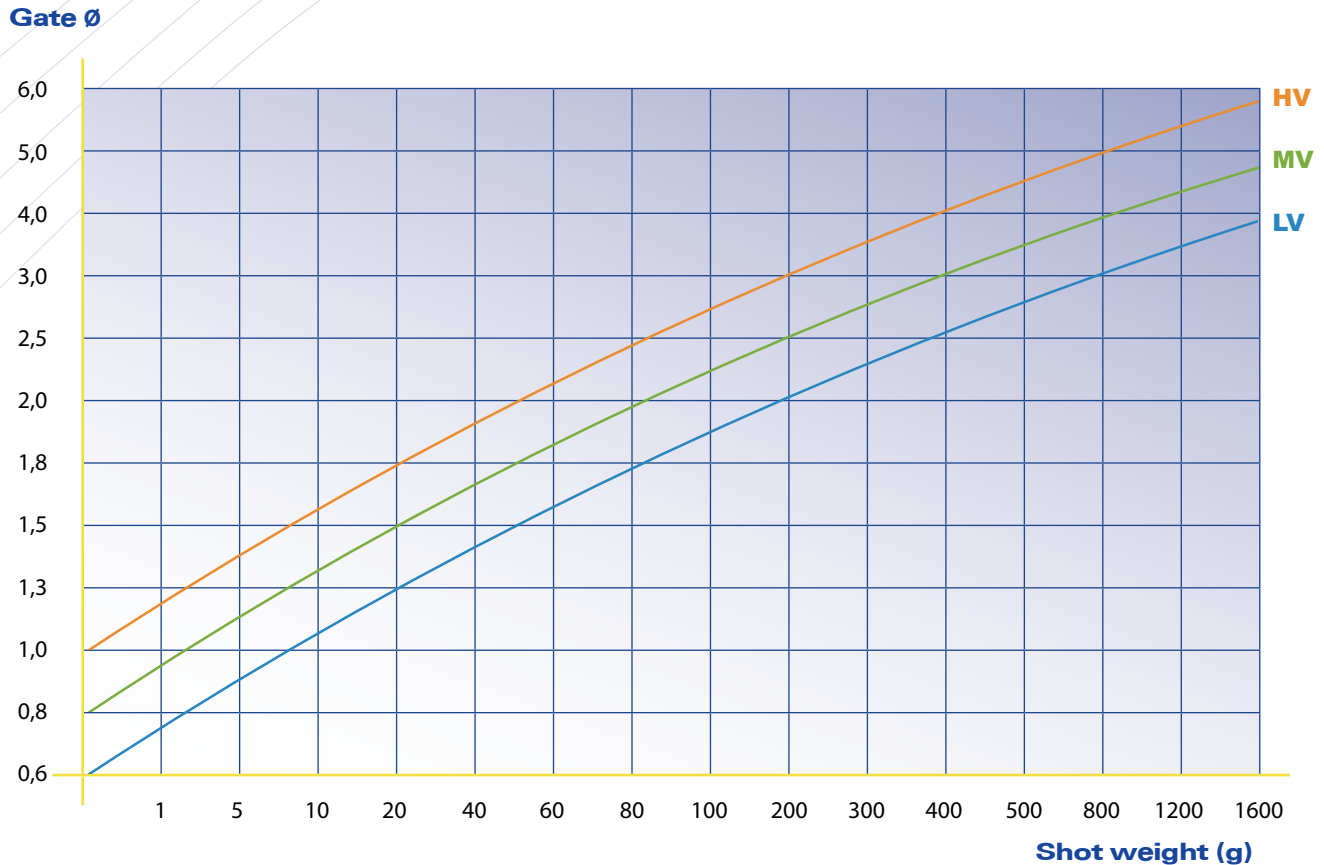
Viscosity:



*** Good ** Ok * Contact HEATLOCK -- Not recommended

All value above & approximate. For details regarding your product welcome to contact Heatlock.

→ A2-07 SC Gate Diameter



NOTE:

1. For "TP" type reduce gate Ø -30%
2. For filled materials increase gate Ø +20%

1. **LV** **Low viscosity** materials PS, PE, PP
2. **MV** **Medium viscosity** materials ABS, SAN, PA, POM
3. **HV** **High viscosity** materials PC, PMMA, PC/ABS, PUR

Above diagram is a guideline built on experience from thousands of applications. However is the result depending on numerous conditions in your mould; balance between shot weight, injection speed, injection pressure, mould temperature, temperature control around the gate area, temperature control opposite the gate.

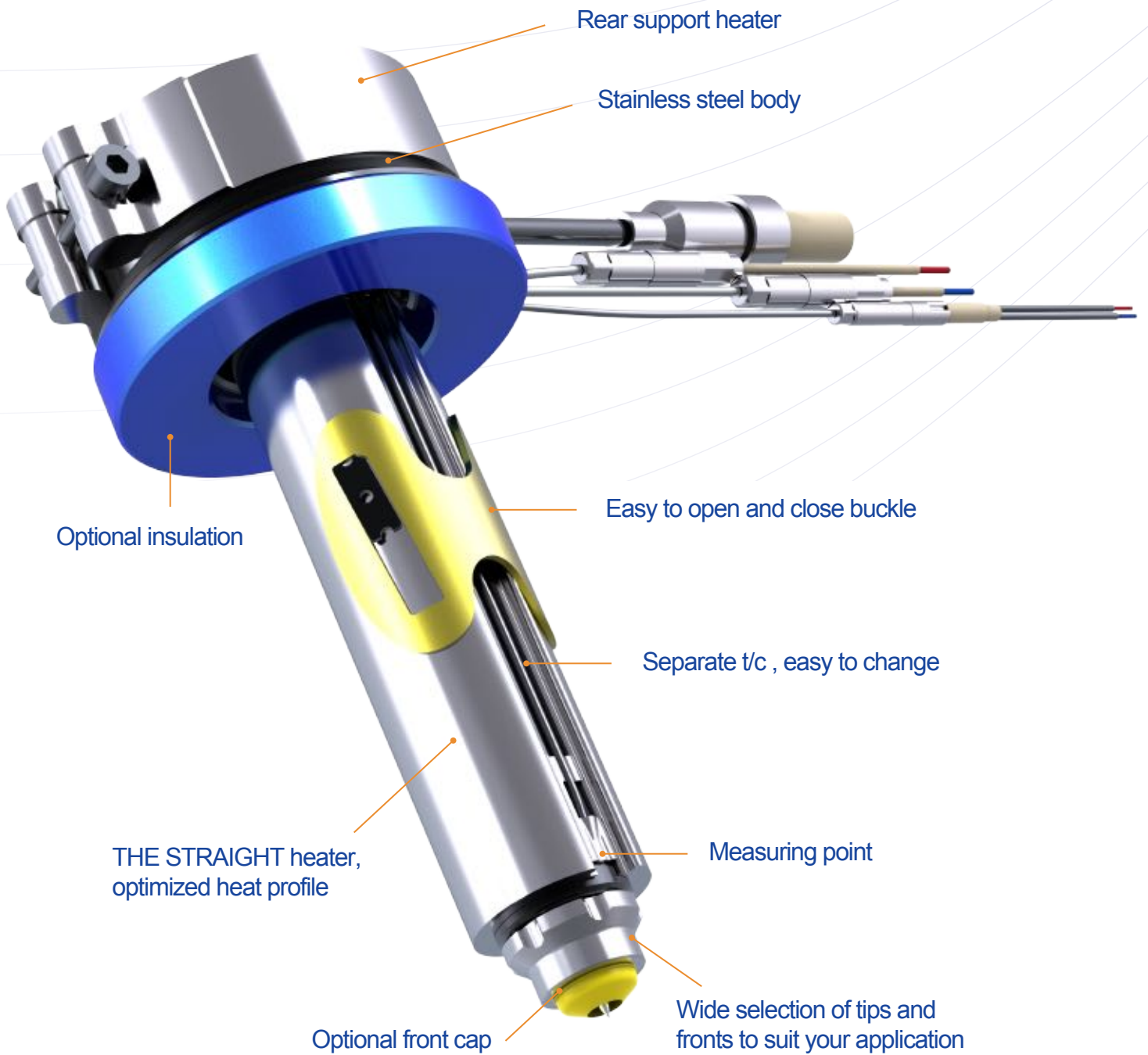
A smaller gate freeze faster compared with a larger gate, a faster cycle time allow smaller gate, long cycle time requires bigger gate.

If cycle time is short and injection speed fast it may be necessary to design gate cooling to avoid gate to overheat.

When you gate on a runner is it recommended to make the gate slightly larger to reduce pressure drop and decrease shear rates. Runner shall be adjusted in size to suit Hot Runner moulding to get shortest cycle time.

Above diagram is a guideline only, final decision is to be decided by the moulder or simulation considering all factors of the process.

Product features



→ A2-07 Single Cavity Nozzle Series



Our modular single cavity work-horse series, simplicity for easy to use and service, modularity to suit your requirement.

All modular elements for this A2 series is the same as used for our A3 All-In-One series. To find nozzle that suit your parts' gate requirements, simply select nozzle length and front style using our nozzle guide.

All 9 front styles available with tips in one exit or three exit tips. For glass filled resins and other materials requiring wear resistant tip select our HBM or TZM tips for maximized life, available in one exit style.

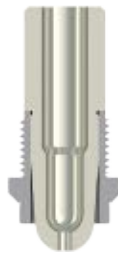
All tips are designed to give minimum stress to material while maintaining a stable controlled gate temperature.



NOS



NOX



POS



NPX



NSX
NEW



NPS



PPS

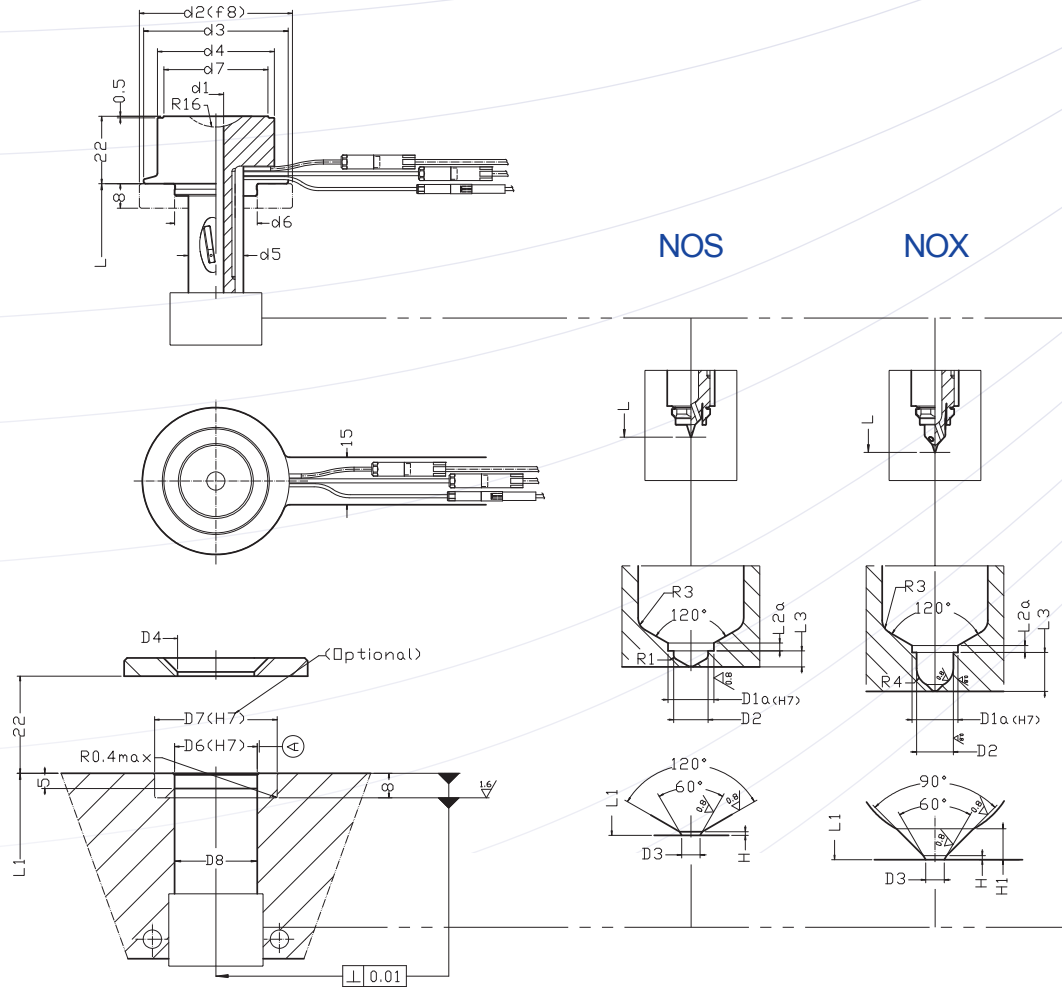


PPX



PSX
NEW

→ A2-07 Single Cavity Nozzle Guide



Order example:



A2SC - NOS - 085 - 07 - 1 - 3 - BH - R16

Nozzle series Front type L Feed dia Tip mat. Exits in tip Band heater Radius

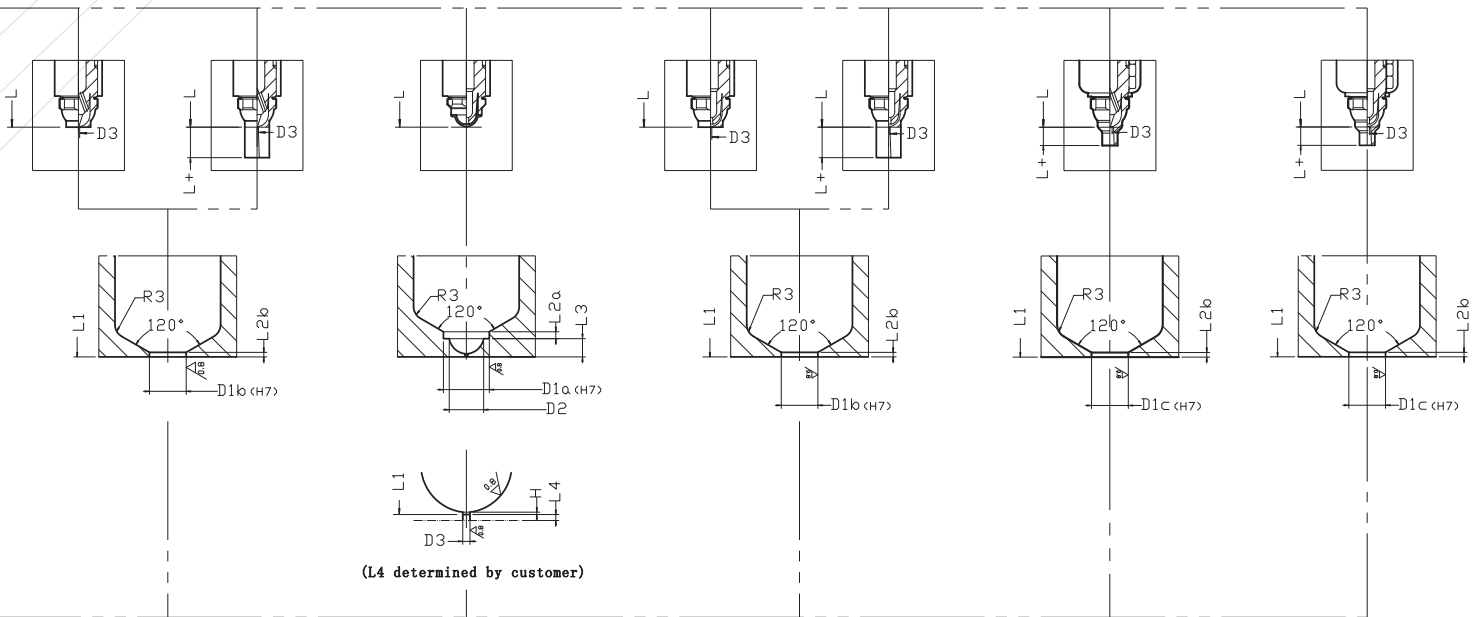
Tip codes:

material: 1=copper alloy,3=HBM-CDC,4=TZM-SHN
Exits: 1=one exit,3=three exits

- Y/N - Y/N - Y/N

Front cap (optional) Front Ti ring (optional) Ti ring (optional)

NPS NPX POS PPS PPX NSX PSX

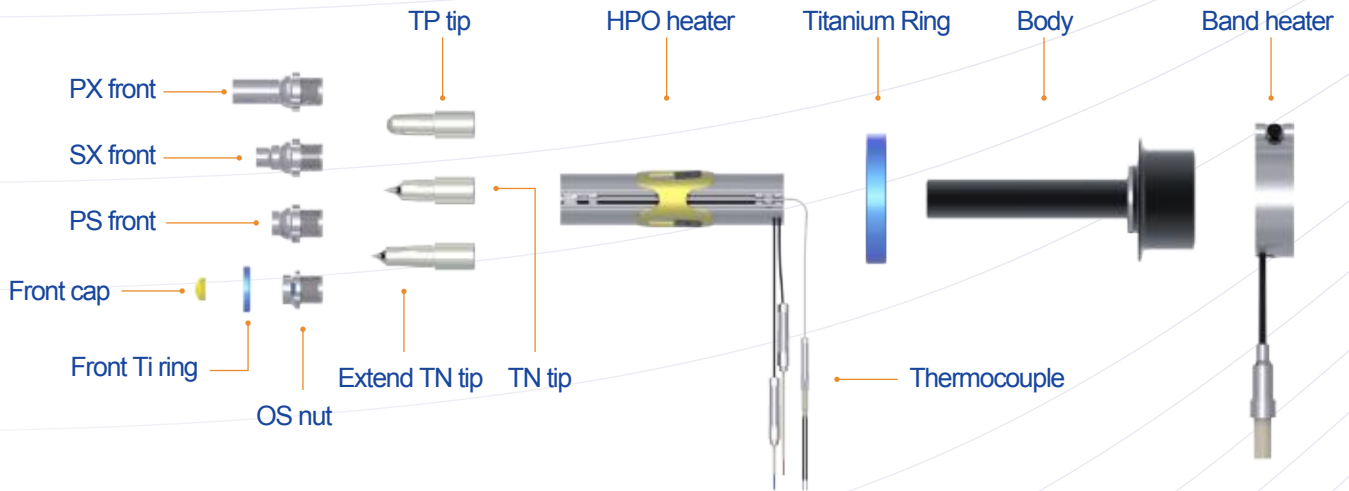


(mm)

		A2-07 SC																		
		NOS NPS NPX POS PPS PPX NSX PSX										NOX								
Nozzle	Size	35	50	60	75	85	100	110	135	160	40	55	65	80	90	105	115	140	165	
	L																			
	L+	15(PX),7(SX)										-								
	d1	7										7								
	d2	T50										T50								
	d3	48										48								
	d4	39										39								
	d5	23										23								
d6	27										27									
d7	34.8										34.8									
Mould	L1	35.12	50.13	60.15	75.18	85.22	100.23	110.27	135.31	160.34	40.12	55.15	65.18	80.19	90.22	105.23	115.27	140.31	165.34	
	L2a	2.5										2.5								
	L2b	1.5										-								
	L3	3.5										8.5								
	H	0.2										0.2								
	H1	-										1.5								
	D1a	12										12								
	D1b	10										-								
	D1c	7										-								
	D2	9										9								
	D3	3≥0.8										3≥0.8								
	D4	36.8										36.8								
	D6	27										27								
	D7	T50										T50								
D8	27										27									

T=Titanium

→ A2-07 Single Cavity Nozzle Spare Parts



Nozzle body spare parts list

Size	Nozzle L	Body	HPO heater	Spare Thermocouple	Band heater	Front Ti Ring	Titanium Ring	Front cap
A2-07 SC	35	A2SCBD203507	HS15150310160	TC00160160	BH239150	OS Nut	TIM05002708 (optional)	A3FC079443 (optional)
	50	A2SCBD205007	HS15150430229					
	60	A2SCBD206007	HS15150560239					
	75	A2SCBD207507	HS15150690248					
	85	A2SCBD208507	HS15150810258	TC00160210		TIM01801203 (optional)		
	100	A2SCBD210007	HS15150940267					
	110	A2SCBD211007	HS15151070277					
	135	A2SCBD213507	HS15151320295	TC00160260				
	160	A2SCBD216007	HS15151580314					

Front Assembly Spare Parts

POS+PPS+PPX+PSX			NOS+NPS+NPX+NSX		
Item code	Nut/Front	Tip	Item code	Nut/Front	Tip
A3POS21212	A3OS21212	A3TP211331	A3NOS212121-1	A3OS21212	A3TN211351-1
A3PPS21012	A3PS21012		A3NOS212123-1		A3TN211353-1
A3PPX21012	A3PX21012		A3NOS212124-1		A3TN211354-1
A3PSX20712	A3SX20712		A3NOS212121-3		A3TN211351-3
NOX			A3NPS210121-1	A3PS21012	A3TN211351-1
Item code	Nut	Tip	A3NPS210123-1		A3TN211353-1
A3NOX212121-1	A3OS21212	A3TN211401-1	A3NPS210124-1		A3TN211354-1
A3NOX212121-3		A3TN211401-3	A3NPS210121-3		A3TN211351-3
			A3NPX210121-1	A3PX21012	A3TN211351-1
			A3NPX210123-1		A3TN211353-1
			A3NPX210124-1		A3TN211354-1
			A3NPX210121-3		A3TN211351-3
			A3NSX207121-1	A3SX20712	A3TN211351-1
			A3NSX207123-1		A3TN211353-1
			A3NSX207124-1		A3TN211354-1
			A3NSX207121-3		A3TN211351-3



Tip spare parts list

Material	1 exit			3 exits
	Copper	HBM-CDC	TZM-SHN	Copper
size 07	A3TN211351-1	A3TN211353-1	A3TN211354-1	A3TN211351-3
	A3TN211401-1			A3TN211401-3

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please visit our website www.heatlock.com

